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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,484	04/16/2004	James H. Schaffner	B-4032DIV2 621826-1	1430
7590	09/21/2005		EXAMINER TRAN, CHUC	
Richard P. Berg c/o LADAS & PARRY Suite 2100 5670 Wilshire Boulevard Los Angeles, CA 90036-5679			ART UNIT	PAPER NUMBER
			2821	
DATE MAILED: 09/21/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,484

Applicant(s)

SCHÄFFNER ET AL.

Examiner

Chuc D. Tran

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-29 is/are rejected.
- 7) ☒ Claim(s) 30-40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/16/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is a response to the Applicant's preliminary amendment submitted on April 16, 2004. In virtue of this amendment claims 1-11 are cancelled; and thus, claims 12-40 are now remaining active in the instant application.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 12-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,867,741. Although the conflicting claims are not identical, they are not patentably distinct from each other because the issued patent '741' and the instant application essentially claim to the same subject matter. The instant application claims the antenna system broader than the issued patent '741', which is obvious and/or inherent over the issued patent '741'.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 25-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Arnold et al (USP. 5,884,181).

Regarding claims 25 and 26, Arnold et al disclose a method for reducing potential interference to a GPS receiver responsive to GPS signals transmitted from a constellation of GPS satellites in Fig. 1 & 2 comprising:

- deploying air vehicles (150) (Fig. 2) serving as a platform, each platform including a receiver for receiving GPS signals from the GPS satellite constellation (abstract);
- transmitting the reference information based upon the GPS signals received from the GPS satellite (abstract); and
- receiving the reference information from the transmitter on the air vehicle (abstract);

wherein

- the GPS receiver is terrestrially located (abstract).

Regarding claim 27, Arnold et al disclose that the information is transmitted from the air vehicles to the terrestrial GPS receiver in a spread-spectrum (abstract).

Regarding claim 28, Arnold et al disclose that the information is transmitted from the air vehicles to the terrestrial GPS receiver by modulation onto a carrier at a specified frequency (Col. 2, Line 3).

Regarding claim 29, Arnold et al disclose that the air vehicle (150) are unmanned (Fig. 2).

Allowable Subject Matter

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4. Claims 30-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 30-40, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in the claim: the GPS receiver includes an antenna system comprising: a Luneberg Lens having a spherically shaped outer surface and a spherically shaped focal surface spaced from its outer surface; a plurality of patch antenna elements disposed along the focal surface of the Luneberg Lens; and a power combiner for combining signals received by the plurality of patch antenna elements.

Citation of relevant Prior Art

Prior art Rudish et al (USP. 6,018,316) disclose multiple beam antenna system and method.

Prior art Procopio (USP. 3,757,333) disclose receiving antenna system.

Prior art Tamil et al (USP. 6,169,910) disclose focused narrow beam communication system.

Prior art Perry et al (USP. 6,252,547) disclose method and apparatus for limiting access to signals delivered via the internet.

Prior art Perlmutter et al (USP. 6,640,189) disclose method of improving satellite reacquisition performance for integrated GP/IG navigational systems.

Prior art Dybdal et al (USP. 5,781,845) disclose adaptive transmitting antenna.


Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC
September 18, 2005


WILSON LEE
PRIMARY EXAMINER